

Date: Wednesday, 11/1/2006 3:52:22 PM  
User: Kim Johnston

# Process Sheet

|   |                                      |
|---|--------------------------------------|
| Customer : CU-DAR001 Dart Helicopters Services      | Drawing Name : DUCT                  |
| Job Number : 29251                                  |                                      |
| Estimate Number : 12316                             |                                      |
| P.O. Number : N/A                                   | Part Number : D34733                 |
| This Issue : 11/1/2006 S.O. No. : N/A               | Drawing Number : D3473 REV B         |
| Prsht Rev. : NC                                     | Project Number : N/A                 |
| First Issue : N/A Type : SMALL / MED FAB            | Drawing Revision : B                 |
| Previous Run : 27018                                | Material : N/A                       |
| Written By : <u>                    </u>            | Due Date : 11/8/2006 Qty: 1 Um: Each |
| Checked & Approved By : <u>                    </u> |                                      |
| Comment : Est Rev:A New Issue 06-03-02 JLM          |                                      |
| Est Rev:B As per Rev B 06-05-24 JLM                 |                                      |

## Additional Product

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
|---------|-----------------------|---------------|

|     |           |                     |
|-----|-----------|---------------------|
| 1.0 | M304S26GA | 304/316 0.018 SHEET |
|-----|-----------|---------------------|



Comment: Qty.: 0.3321 sf(s)/Unit Total: 0.3321 sf(s)

304/316 0.018 SHEET

Batch: M102393

ML 06 11 02

|     |           |                |
|-----|-----------|----------------|
| 2.0 | WATER JET | FLOW WATER JET |
|-----|-----------|----------------|



Comment: FLOW WATER JET

Cut as per Dwg D3473

Dwg Rev: B

Prog Rev: B

ML 06 11 02

(1)

|     |     |  |
|-----|-----|--|
| 3.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
|-----|-----|--|



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

ML 06 11 02

(1)

|     |     |              |
|-----|-----|--------------|
| 4.0 | QC8 | SECOND CHECK |
|-----|-----|--------------|



Comment: SECOND CHECK

ML 06/11/03 (2)

|     |             |                               |
|-----|-------------|-------------------------------|
| 5.0 | SMALL FAB 1 | SMALL & MEDIUM FAB RESOURCE 1 |
|-----|-------------|-------------------------------|



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Deburr if necessary.

2-Form as per Dwg D3473 using DT8860

MF. 06-11-06 (1)

SB 06/11/07 (1)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: LD Date: 06/11/08  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

NOTE: Date & initial all entries

Date: Wednesday, 11/1/2006 3:52:22 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUCT

Job Number: 29251

Part Number: D34733

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 06.11.07

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: GA

SB 06/11/07

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

SB 06/11/08

Job Completion



U 06.11.08

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

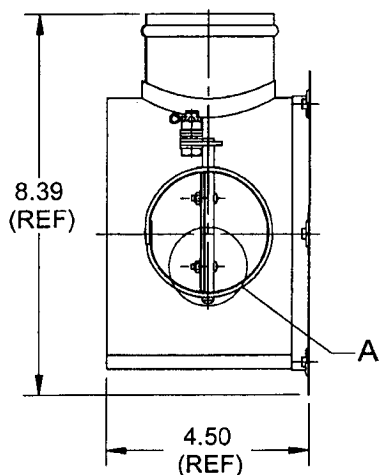
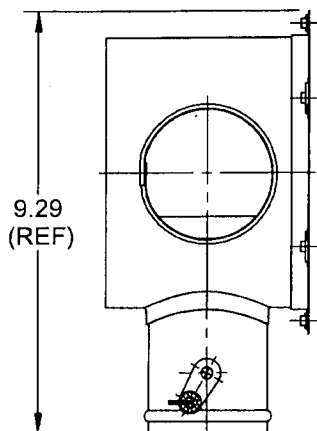
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

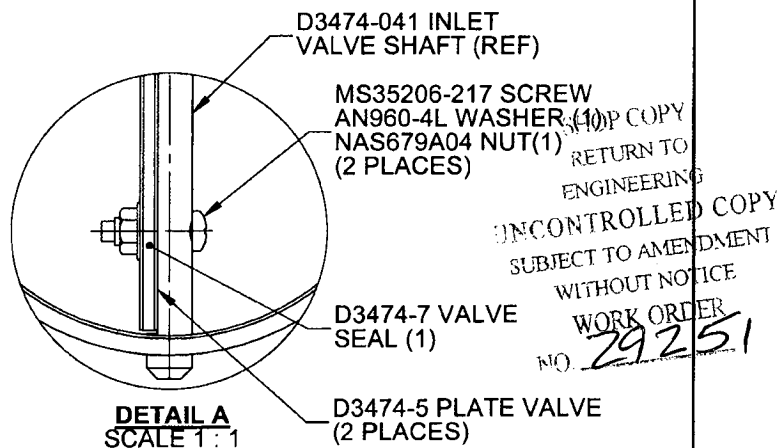
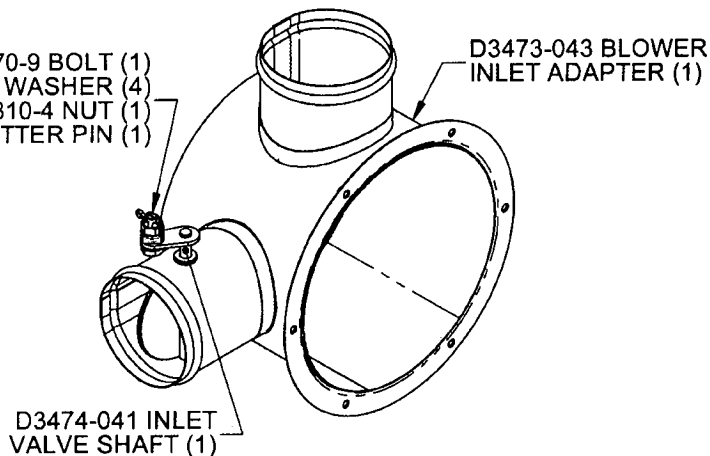


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| CHECKED<br>H            | APPROVED<br>H  | DRAWING NO.<br><b>D3473</b>                              | REV. B<br>SHEET 1 OF 7 |
| DATE<br><b>06.05.16</b> |                | TITLE<br><b>BLOWER INLET ADAPTER</b>                     | SCALE<br>1:4           |
| A                       | 06.02.07       | NEW ISSUE  |                        |
| B                       | 06.05.16       | D3473-5F/-7F: 9.750 & 8.810 WERE 9.60 & 8.60             |                        |

RELEASED  
06-05-16 H



D3470-9 BOLT (1)  
AN960-416 WASHER (4)  
AN310-4 NUT (1)  
MS24665-153 COTTER PIN (1)



DETAIL A  
SCALE 1:1

### D3473-041 BLOWER INLET ADAPTER

#### NOTES:

- 1) IDENTIFY WITH DART P/N D3473-041 USING FINE POINT PERMANENT INK MARKER
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

| QTY<br>-041 | P/N         | DESCRIPTION           |
|-------------|-------------|-----------------------|
| X           | D3473-041   | BLOWER INLET ADAPTER  |
| 1           | D3470-9     | BOLT                  |
| 1           | D3471-043   | BLOWER INLET WELDMENT |
| 1           | D3474-041   | INLET VALVE SHAFT     |
| 2           | D3474-5     | BUTTERFLY VALVE       |
| 1           | D3474-7     | BUTTERFLY VALVE SEAL  |
| 1           | AN310-4     | NUT                   |
| 2           | AN960-4L    | WASHER                |
| 4           | AN960-416   | WASHER                |
| 1           | MS24665-153 | COTTER PIN            |
| 2           | MS35206-217 | SCREW                 |
| 2           | NAS679-A04  | NUT                   |

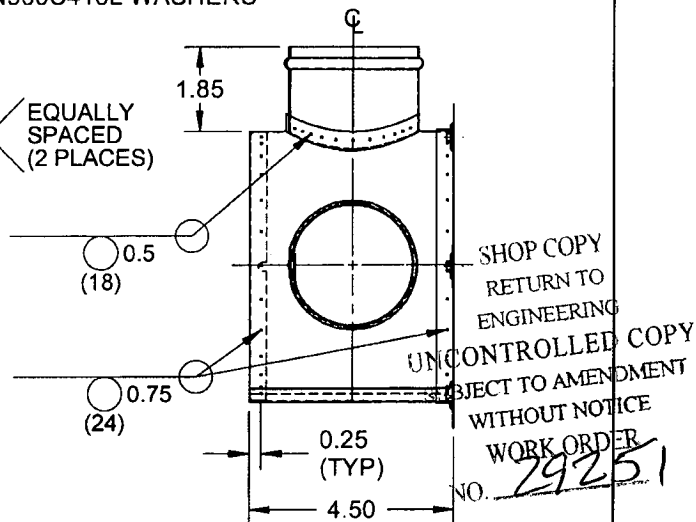
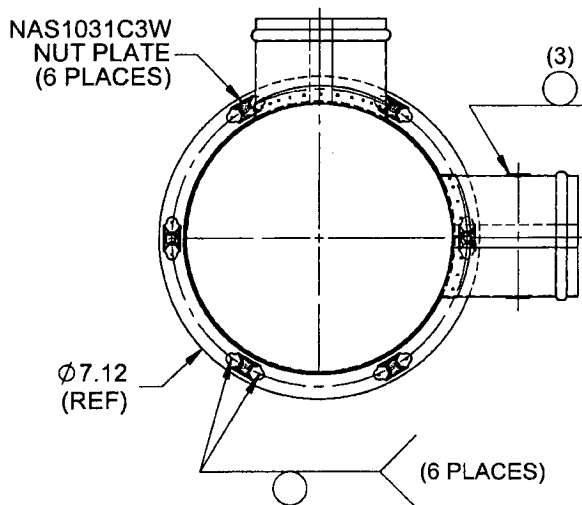
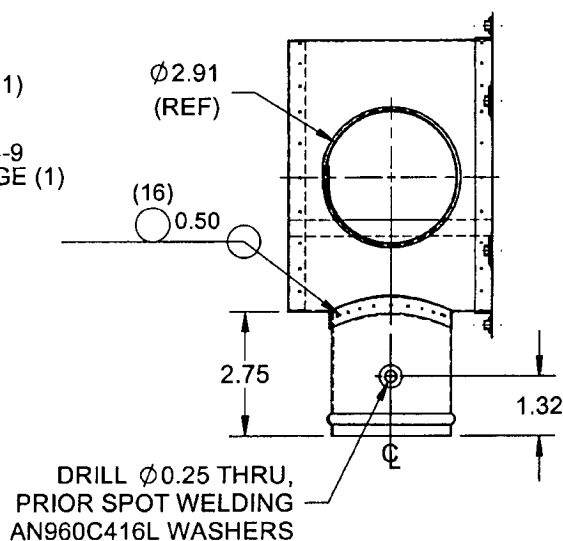
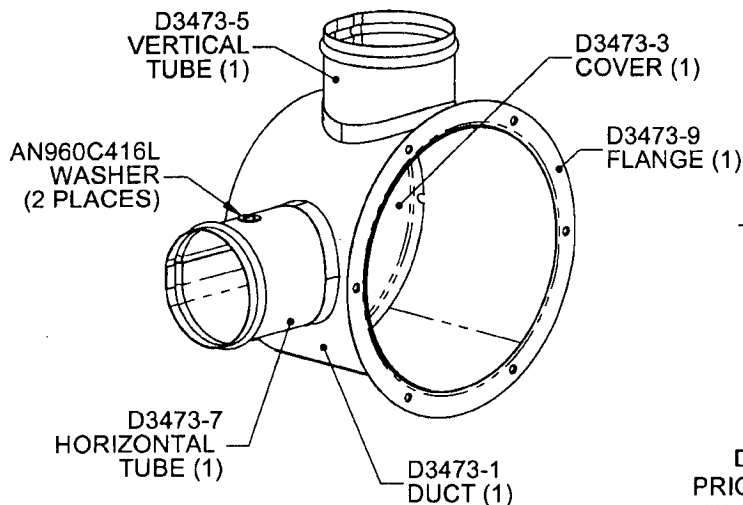
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| DATE<br><b>06.05.16</b> |               | TITLE<br><b>BLOWER INLET ADAPTER</b>                     | SCALE<br>1:4           |

RELEASED  
06.05.16 H



### D3473-043 BLOWER INLET WELDMENT

#### NOTES:

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

| QTY<br>-041 | P/N        | DESCRIPTION           |
|-------------|------------|-----------------------|
| X           | D3473-043  | BLOWER INLET WELDMENT |
| 1           | D3473-1    | DUCT                  |
| 1           | D3473-3    | COVER                 |
| 1           | D3473-5    | VERTICAL TUBE         |
| 1           | D3473-7    | HORIZONTAL TUBE       |
| 1           | D3473-9    | FLANGE                |
| 2           | AN960C416L | WASHER                |
| 6           | NAS1031C3W | NUT PLATE             |

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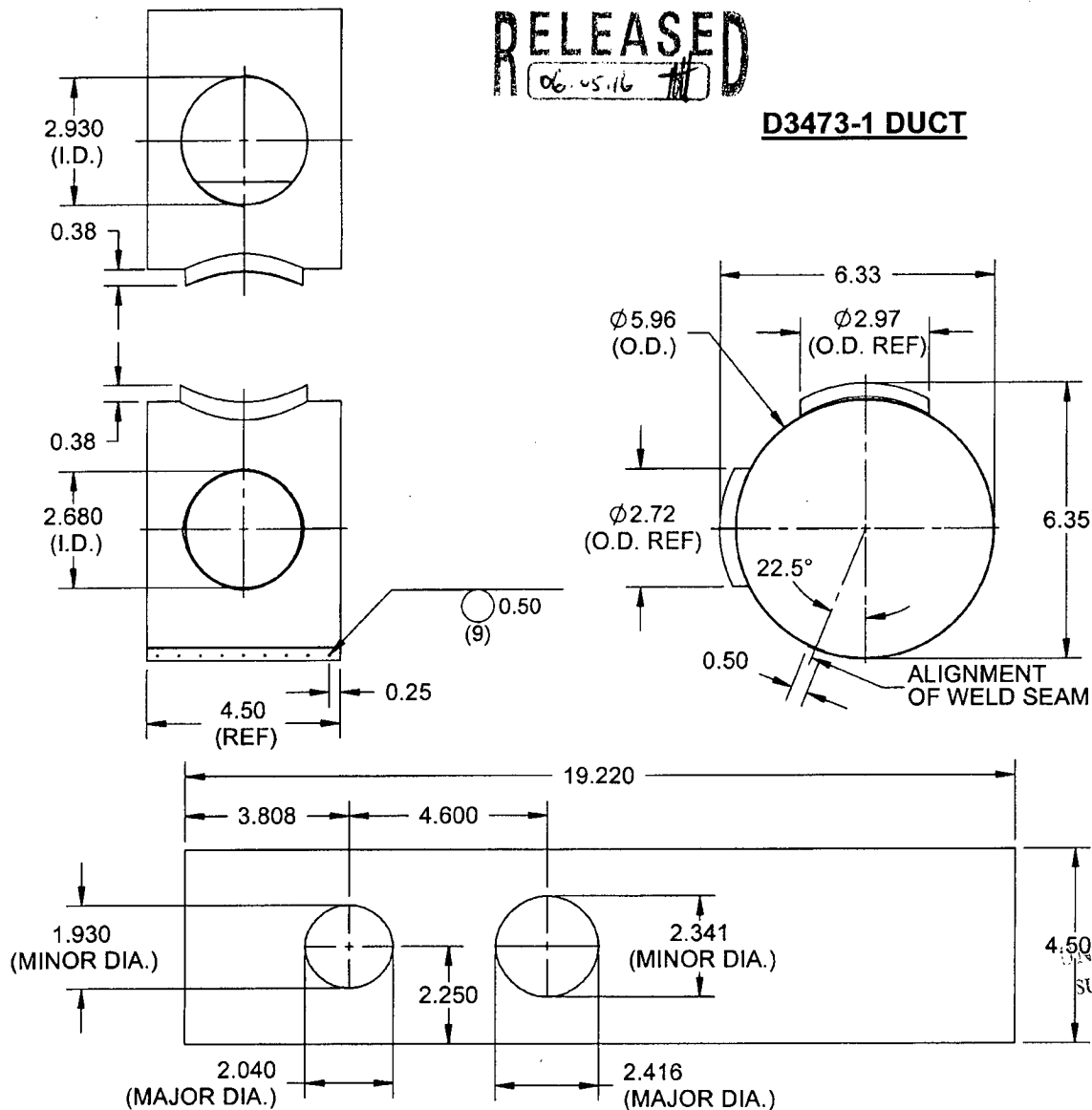
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| DATE<br><b>06.05.16</b> |                | TITLE<br><b>BLOWER INLET ADAPTER</b>                     | SCALE<br>1:4           |

RELEASED  
06.05.16

### D3473-1 DUCT

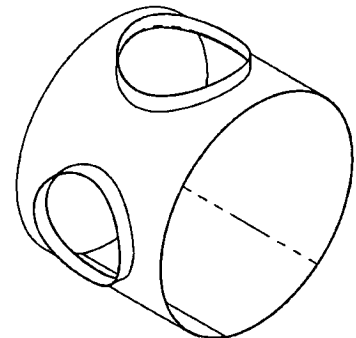


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### D3473-1F DUCT FLAT PATTERN

#### NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED)  
2B FINISH 26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

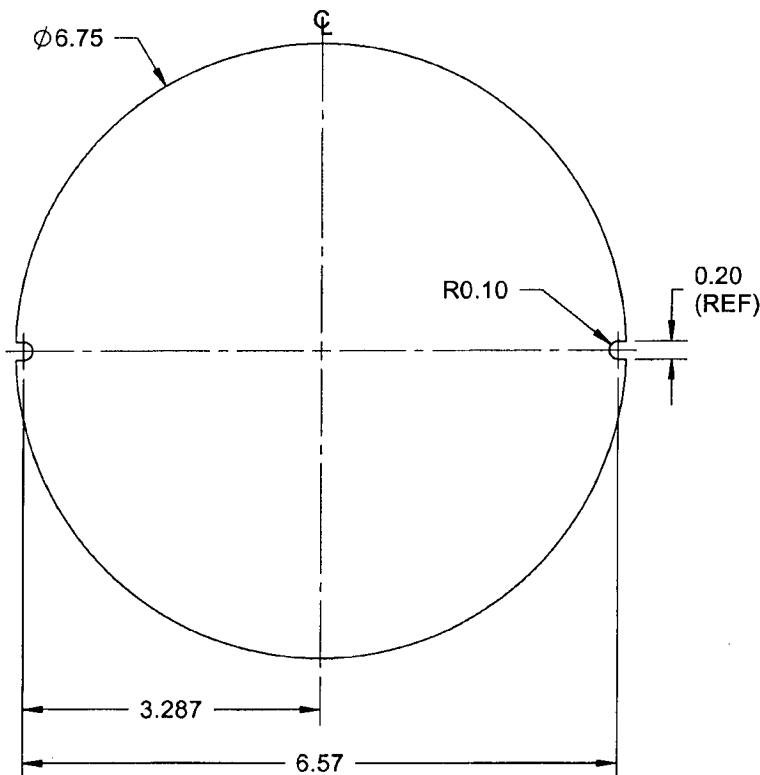
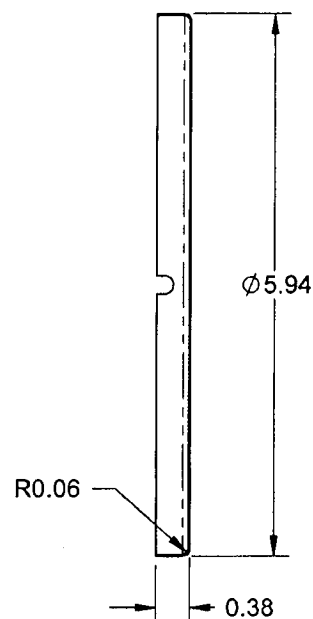


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| DATE<br><b>06.05.16</b> |               | TITLE<br><b>BLOWER INLET ADAPTER</b>                     | SCALE<br>1:2           |

**RELEASED**  
06-05-16 H**D3473-3F COVER FLAT PATTERN****D3473-3 COVER****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) PART IS SYMMETRICAL ABOUT CENTERLINE
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

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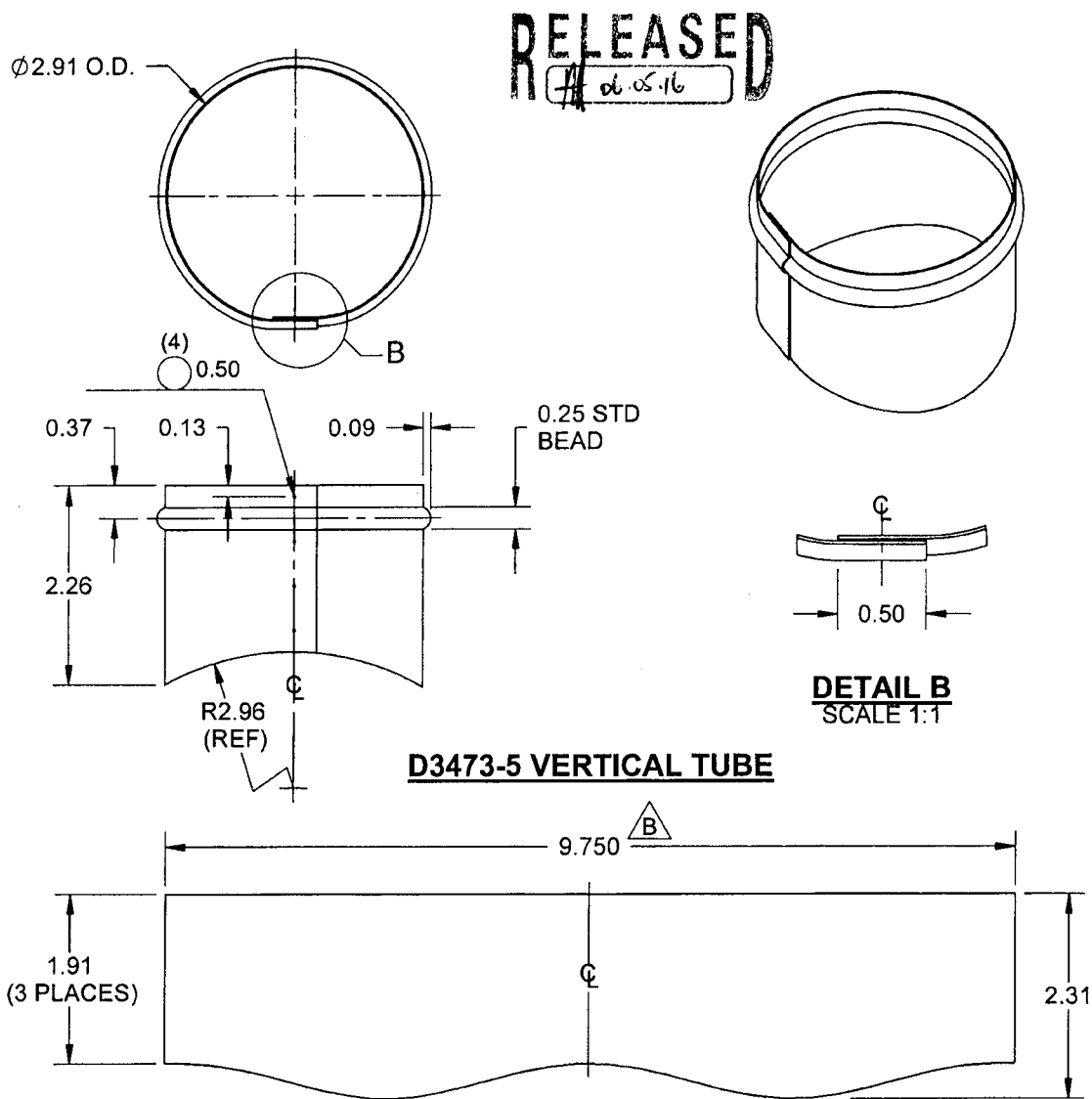
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| DATE<br><b>06.05.16</b> |                | TITLE<br><b>BLOWER INLET ADAPTER</b>                     | SCALE<br>1:2           |



### **D3473-5F VERTICAL TUBE FLAT PATTERN**

#### **NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

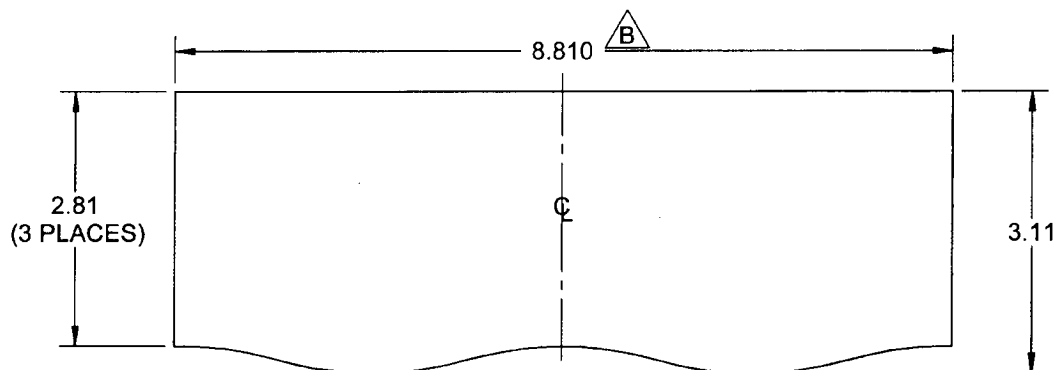
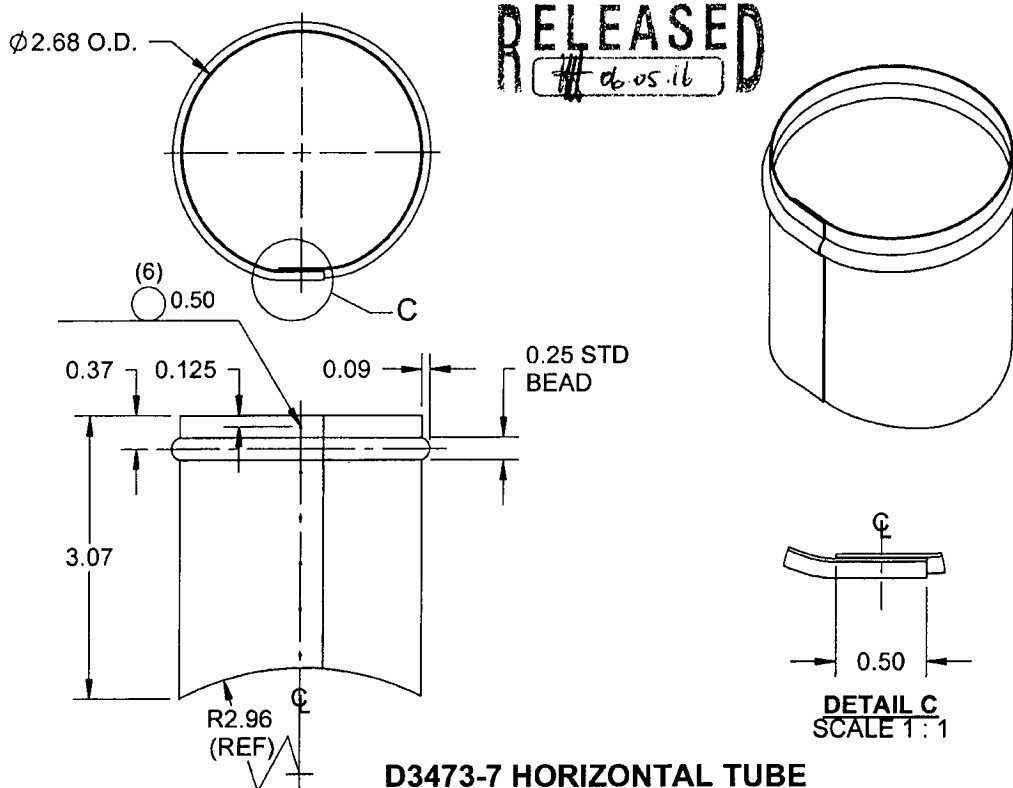
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| DATE<br><b>06.05.16</b> |                       | TITLE<br><b>BLOWER INLET ADAPTER</b>                     | SCALE<br>1:2           |



### D3473-7F HORIZONTAL TUBE FLAT PATTERN

#### NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

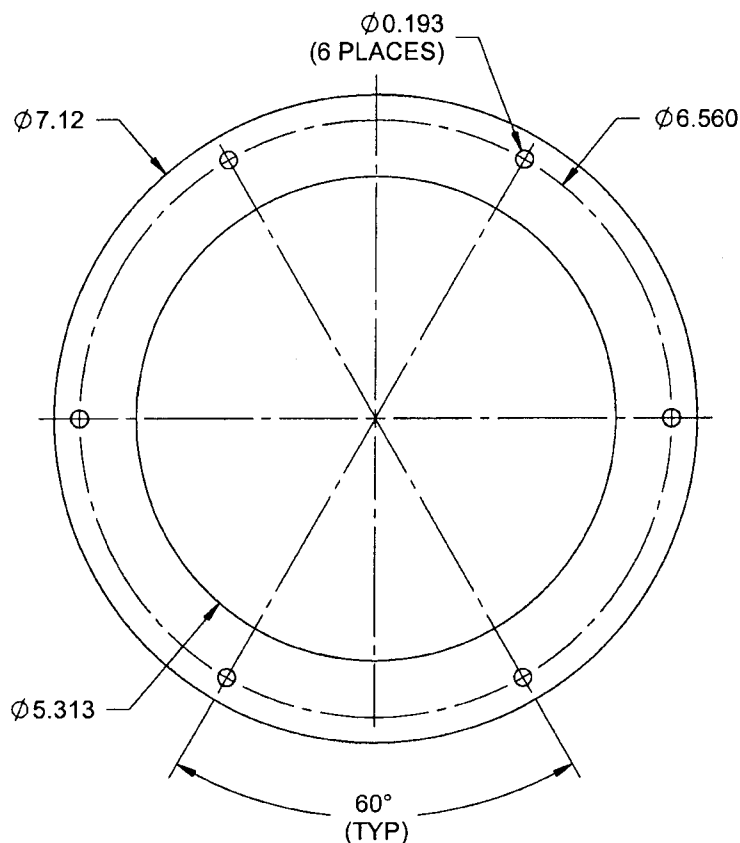
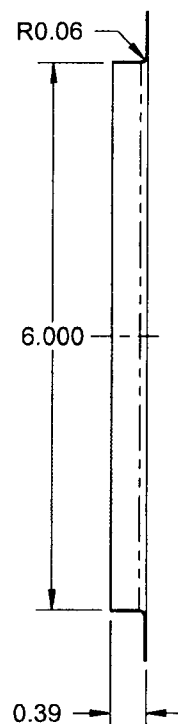
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|                               |                                |  |                        |
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| CHECKED<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i> | DRAWING NO.<br><b>D3473</b>                              | REV. B<br>SHEET 7 OF 7 |
| DATE<br><b>06.05.16</b>       |                                | TITLE<br><b>BLOWER INLET ADAPTER</b>                     | SCALE<br>1:2           |

**RELEASED**  
*[Stamp]***D3473-9F FLANGE FLAT PATTERN****D3473-9 FLANGE BENDING DETAIL****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S2600)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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|   |                             |
|---|-----------------------------|
| <b>DART AEROSPACE LTD</b>                 | <b>Work Order:</b> 29251    |
| <b>Description:</b> Duct Cover            | <b>Part Number:</b> D3473-3 |
| <b>Inspection Dwg:</b> 3473 <b>Rev:</b> B | Page 1 of 1                 |

## FIRST ARTICLE INSPECTION CHECKLIST

|          |                      |          |                  |
|----------|----------------------|----------|------------------|
| <b>x</b> | <b>First Article</b> | <b>x</b> | <b>Prototype</b> |
|----------|----------------------|----------|------------------|

[illegible]

|                                 |                                |  |
|---------------------------------|--------------------------------|--|
| Measured by: <i>[Signature]</i> | Audited by: <i>[Signature]</i> | Prototype Approval: <i>[Signature]</i> |
| Date: <i>8/1/02</i>             | Date: <i>8/1/03</i>            | Date: <i>N/A</i>                       |

| Rev | Date | Change    | Revised by | Approved |
|-----|------|-----------|------------|----------|
| A   |      | New Issue | KJ/JLM     |          |